

WE CLAIM:

1. A computer service method for selectively  
creating job tickets in response to error alerts, the  
error alerts being created during package distribution on  
a computer network comprising a plurality of network  
5 devices and including information related to package  
distribution failure, the method comprising:

receiving an error alert;

processing the error alert to identify a failure  
type from the failure information;

10 updating an error tracking file comprising tracking  
values for each of the failure types to incrementally  
change a tracking number for the identified failure type;

comparing the updated tracking value for the  
identified failure type to a threshold limit for the  
15 identified failure type to determine if the threshold  
limit is exceeded; and

when the comparing determines the threshold limit is  
exceeded, creating a job ticket including at least a  
portion of the failure information from the error alert  
20 to initiate service in the computer network.

2. The method of claim 1, wherein the threshold  
limits are predetermined and stored in memory accessible  
during the comparing and wherein the threshold limits are  
selected to differ for at least some of the failure  
5 types.

3. The method of claim 2, further including  
modifying the threshold limits in memory, the modifying  
being completed manually or automatically.

4. The method of claim 1, wherein the error alert  
processing further includes retrieving identification  
data on a network device affected by the package

5 distribution failure, the method further includes determining with the identification data whether the affected network device is included on an outage list, and further wherein the job ticket creating is not completed when the affected network device is determined to be included on the outage list.

5 5. The method of claim 1, wherein the error alert processing further includes retrieving identification data on a network device affected by the package distribution failure and further wherein the tracking values for each of the failure types are included in the error tracking file for each of the network devices.

6. The method of claim 5, wherein the threshold limits are selectable for each of the network devices.

5 7. The method of claim 1, wherein the error alert processing further includes retrieving location information for a network device affected by the package distribution failure for use in the job ticket creating, and further wherein the method includes matching the retrieved location information with device location information stored in memory and when a match is not achieved, modifying the retrieved location information to match the device location information.

5 8. The method of claim 1, further including processing the error alert to retrieve location information for the network device affected by the package distribution failure, determining a job ticket recipient from a set of network maintenance centers based on the location information, and transmitting the created job ticket to the job ticket recipient.

20250424 09:00:00

9. The method of claim 8, wherein the job ticket is an e-mail message and the transmitting uses a data communications network, and further wherein the transmitting comprises verifying whether the transmitting was completed and if not successful, repeating the transmitting a predetermined retry value.

10. A method for automatically responding to error alerts created by network devices during operation of a computer network, comprising:

providing a network device file comprising identification information for each of the network devices in the computer network;

receiving an error alert comprising failure information related to a network failure and to at least one of the network devices affected by the network failure;

validating the received error alert as being transmitted by one of the network devices by comparing the failure information in the received error alert related to the one network device with the identification information in the network device file; and

if the received error alert is validated, creating a job ticket for the one network device including at least a portion of the failure information for use in servicing the one network device.

11. The method of claim 10, wherein the identification information includes a domain for each of the network devices and wherein the validating includes comparing a domain included in the failure information of the error alert with the domain in the identification information for the one network device.

00779147 020801

12. The method of claim 10, wherein the identification information includes a node name for each of the network devices and wherein the validating includes comparing a node identification included in the failure information of the error alert with the node name in the identification information for the one network device.

13. The method of claim 10, wherein the error alert is an e-mail message transmitted by one of the network devices and wherein the validating includes inspecting the subject line of the error alert for non-valid subject terms.

14. The method of claim 13, wherein the non-valid subject terms include forward and reply.

15. The method of claim 10, further including parsing the error alert to filter out error tracking information and the portion of the failure information included in the job ticket.

16. The method of claim 15, wherein the portion of the failure information includes geographic location information for the one network device, and wherein the method further includes identifying a maintenance center associated with the one network device based on the geographic location information.

17. The method of claim 16, further including electronically transmitting the created job ticket to the identified maintenance center.

18. The method of claim 17, wherein the maintenance center identifying includes determining a member of a service group associated with the identified maintenance

center and responsible for servicing the one network  
5 device and wherein the electronically transmitting  
includes directly notifying the service group member.

19. The method of claim 15, wherein the error  
tracking information includes an error type and wherein  
the method includes updating a corresponding tracking  
value in an error tracking file to incrementally change  
5 the tracking value and includes comparing the changed  
tracking value to a threshold limit for the error type to  
determine if the job ticket creating should be completed.

20. The method of claim 10, further including prior  
to the job ticket creating, performing diagnostics for  
10 the one network device to obtain diagnostic information  
and verifying location information in the failure  
information to obtain verified location information, and  
wherein the job ticket creating includes the diagnostic  
information and the verified location information.

21. A computer program product for processing error  
alerts created for a computer network to determine when  
to create job tickets to address errors identified in the  
error alerts, comprising:

5 first computer code devices configured to cause a  
computer to process a received error alert to identify a  
failure type from failure information included in the  
received error alert and to identify a source of the  
received error alert;

10 second computer code devices configured to cause a  
computer to validate the received error alert by  
accessing a network file including identification  
information for each network device in the computer  
network and determining whether the source of the  
15 received error alert is included in the network file;

third computer code devices configured to cause a computer to, after the error alert is validated, update an error tracking value for the identified failure type and to compare the updated error tracking value with a threshold limit for the identified failure type; and

fourth computer code devices configured to cause a computer to, when the threshold limit is exceeded, create a job ticket in response to the validated error alert comprising at least a portion of the failure information.

22. The computer program product of claim 21, wherein the first computer code device is further configured to process the received error alert to obtain identification information on the affected one of the network devices from the failure information and further including fifth computer code devices configured to cause a computer to access a device outage list in memory to use the identification information to determine if the affected network device is on the outage list.

23. The computer program product of claim 21, further including fifth computer code devices configured to cause a computer to verify and if not verified, correct at least a portion of the failure information included in the job ticket.

24. A service support system for at least partially automatically processing error alerts created in a distributed computer network in response to a failure during distribution of a software package to network devices and for selectively creating and issuing job tickets to correct the failure, comprising:

a memory device including files for storing identification data for each of the network devices in the computer network, for storing threshold limits for

10 previously identified network failure types, and for  
storing tracking information for each of the failure  
types indicating a number of the error alerts received  
relating to each of the failure types; and

an auto ticket tool in communication with the  
15 network devices to receive the error alerts and with the  
memory device to access the identification data and the  
threshold limits, wherein the auto ticket tool is  
configured to process each of the error alerts, to  
determine the failure type, to update the tracking  
20 information for the failure type, to determine if the  
threshold limit for the failure type is exceeded based on  
the updated tracking information, and if the threshold  
limit is determined to be exceeded, creating a job ticket  
for a network device identified by the identification  
25 data.

25. The system of claim 24, wherein auto ticket  
tool is further configured to determine a recipient  
network device for the job ticket based on location  
information included in the error alert and to  
5 electronically transmit the job ticket to the recipient  
network device.

26. The system of claim 24, wherein the memory  
device is further adapted for storing an outage listing  
comprising identification information for each of the  
network devices that are being serviced and wherein the  
5 auto ticket tool is further operable to prior to only  
create the job ticket after determining the identified  
network device is not on the outage listing.

27. The system of claim 24, wherein the memory  
device is further adapted for storing a device location  
information comprising a geographic location for each of

the network devices and wherein the auto ticket tool is  
5 further operable to compare location information included  
in the error alert with the geographic location  
information in the device location information and to  
modify the included location information for use in  
creating the job ticket.

00779147-0208001